101 Industrial Park Road, Suite 205
Taunton, MA 01604

T: 508-923-0879
F: 508-923-0894

Brown AND Caldwell

July 6, 2017

Mr. Mark Fairbrother
Solid Waste Section Chief
Massachusetts Department of Environmental Protection
Northeast Regional Office
205B Lowell Street
Wilmington, Massachusetts 01887

Subject: SAUGUS
Major Permit Modification, Wheelabrator Saugus Ash Monofill
Transmittal No. X271439

Dear Mr. Fairbrother:

In response to our meeting with the MassDEP on June 1, 2017, we provide the following supplemental information related to modification to the Final Engineering Plan and the continued use of the Saugus Ash Monofill in Saugus, Massachusetts. An application for Major Modification of the Monofill was submitted to the MassDEP on April 19, 2017. The information herein is transmitted on behalf of Wheelabrator Saugus, Inc. and is intended to supplement the application.

Supplement to Schedule and Sequence for Operation

A summary of operational sequencing was provided in Section 5.4 of the Project Summary for the 2017 Revised FEP, as well as additional general sequencing information in Section 7.1 of the Operations and Maintenance Plan of the 2017 Revised FEP.

Additional sequencing details are provided below:

- Ash placement will continue in Phase IV through the winter of 2017-2018 to create a suitable plateau for the relocation of the leaf and yard waste composting operation. A staging area for any off-site ash transportation will be constructed on the newly created plateau as well.
- In the spring of 2018, a new pad for the leaf and yard waste composting operation will be constructed in the southern area of the Phase IV plateau. The new pad is expected to begin receiving incoming leaf and yard wastes in mid-2018.
- Leaf and yard wastes received prior to that time will be received and composted at the existing pad. The materials composted at the existing pad will be relocated to the existing stockpile area in Phase III during the late-summer of 2018.
- During the late-summer of 2018, ash disposal activities will then commence in the area of the existing composting pad. No appreciable amount of ash has ever been placed in the area of the existing pad. As such, this area needs to be preloaded to minimize subsurface settlement that could otherwise occur after final cover construction.

- Following a period of preloading, construction of roughly 5 to 8 acres of final cover in Phase V is projected for the summer of 2019.
- During the second half of 2019, the existing final cover soils in the lower reaches of Phase II, Valley 2 will be removed and stockpiled for future use. If possible, some of these soils may be used in the final cover construction in Phase V.
  - In early 2020, the geomembrane layer will be removed from this area and all contact and non-contact water control features will be constructed.
  - Ash placement in the lower reaches of Phase II, Valley 2 will commence at that time.
- Late-2020, the existing final cover soils in the upper reaches of Phase I, Valley 2 will be removed and stockpiled for future use.
  - In early 2021, the geomembrane layer will be removed from this area and all contact and non-contact water control features will be constructed.
  - Ash placement in the upper reaches of Phase II, Valley 2 will commence at that time.
  - Materials used for preloading Phases III and IV may be used to fill in the areas of Phase II, Valley 2.
- Late-2021, the existing final cover soils in the lower reaches of Phase II, Valley 1 will be removed and stockpiled for future use.
  - In early 2022, the geomembrane layer will be removed, all contact and non-contact water control features will be constructed.
  - Ash placement in the lower reaches of Phase II, Valley 1 will commence.
  - Materials used for preloading in Phases III and IV may be used to fill in the areas of Phase II, Valley 1.
- Late-2022, the existing final cover soils in the upper reaches of Phase I, Valley 1 will be removed and stockpiled for future use.
  - In early 2023, the geomembrane layer will be removed and all contact water containment features will be constructed.
  - Ash placement in the upper reaches of Phase I, Valley 1 will commence.
  - At this time (2023), the leaf and yard waste composting operation in Phase IV will be discontinued, unless the operation was discontinued earlier due to other factors.
  - Materials used for preloading in Phases III and IV may be used to fill in the areas of Phase II, Valley 1.
- 2024: Final cover installed in Phases I and II, Valley 1 (approx. 14 acres)
- 2025: Final cover installed in Phases I and II, Valley 2 (approx. 15 acres)
- Spring 2026 to Fall 2027: Final cover will be constructed in Phases III and IV (approx. 50 acres) in two stages of construction.

The above narrative provides a proposed sequence of activities. The schedule of activities is estimated and will be adjusted based on filling rates. An update on activities and schedule is provided in the annual report for the Monofill.

Supplement to Project Summary Section 5.4 Operations and Maintenance

Topsoil from the removal of the existing final cover in Phases I and II will be stockpiled for reuse in future final cover construction or operational cover at the Monofill. Prior to reuse in future final cover construction, the topsoil will be tested for conformance with the technical specifications for Soil Suitable to Support Vegetation in the Closure and Post-Closure Plan. The testing will be documented in future Construction Certification Reports.

It is anticipated existing final cover geomembrane removed from Phases I and II will be recycled or used for energy recovery depending on available recycling options. Any geomembrane that is not suitable for recycling or energy recovery will be disposed in the Monofill.

Supplement to Environmental Monitoring Plan Section 3.0 Surface Water Sampling

The sampling and analysis requirements under the MSGP are subject to amendment by the USEPA. A copy of monitoring requirements taken from the Monofill's Storm Water Pollution Prevention is provided in Attachment A.

Supplement to Environmental Monitoring Plan Section 4.2 Leachate Quality Monitoring

Leachate quality monitoring is subject to amendment by the Lynn Water and Sewer Commission. A copy of the current Industrial Wastewater Discharge Permit is provided in Attachment B.

If you have any questions, please contact the undersigned.

Very truly yours,
Brown and Caldwell

Alan R. Kirschner
Vice President

Cc: Saugus Board of Health
James Connolly, Wheelabrator
Peter Kendrigan, Wheelabrator

Enclosures
Supplemental Transmittal Form, X271439
Attachment A – Storm Water Monitoring
Attachment B – Industrial Wastewater Discharge Permit

Massachusetts Department of Environmental Protection

Supplemental Transmittal Form

(to accompany supplemental material or payment to previously submitted DEP permit applications)

1. Transmittal Number	Obtain from the upper right hand corner of the original application's Transmittal Form:	
	X271439	

2. Facility Information	(a) Facility Name:	(b) Facility Address:
	Saugus Ash Monofill	100 Salem Turnpike
	(c) Facility Town/City	(d) Telephone Number:
	Saugus, MA 01906	781-233-7600

3. Permit Information	(a) Permit Name:	(b) Permit Code: (from original application)
	Landfill - Major Modification	BWP SW 11

4. Reason For Supplemental Submission	☒	(a) Response to Request for Additional information	☐	(b) Response to Statement of Deficiency
	☐	(c) Supplemental Fee Payment	☐	(d) Withdrawal of Application
	☐	(e) Other (please specify below):		

5. Form Prepared by	(a) Name of individual or firm preparing this submission:	(b) Affiliation with application, i.e. applicant, consultant to applicant:
	Brown and Caldwell	Consultant to applicant
	(c) Contact Name:	(d) Contact Telephone #:
	Alan Kirschner, P.E.	508-819-1444

Attachment A

Storm Water Monitoring

STORMWATER POLLUTION PREVENTION PLAN

Saugus RESCO Landfill

Saugus, Massachusetts

SWPPP Revision June 2017

8 MONITORING

Per MSGP Part 5.2.5.3, this section describes the following types of monitoring:

- Benchmark monitoring
- Effluent limitations guidelines monitoring *(not required)*
- State-specific monitoring (*not required*)
- Tribal-specific monitoring (*not required*)
- Impaired waters monitoring *(not required)*
- Visual Assessments
- Other monitoring as required by EPA

8.1 Benchmark Monitoring

Per MSGP Part 6.2.1, benchmark monitoring is required at the Landfill because it is within an industrial sector that the EPA suggests as having a high potential to discharge a pollutant at concentrations of concern.

Benchmark monitoring must be conducted for the first four full quarters of permit coverage, commencing no earlier than the 1st quarter of 2016 and continue until the average of four consecutive monitoring periods are below the benchmark concentrations. This monitoring was concluded with the sample taken during the 1st quarter of 2017. Due to the summer drought of 2016 no sample was able to be collected in the 3rd quarter.

8.1.1 Sampling Location

Samples for benchmark monitoring shall be collected from the outfall pipe from the Section III sedimentation pond to the level spreader.

8.1.2 Sampling Frequency

Per MSGP Parts 6.1.7 and 6.2.1.2, samples shall be collected quarterly during the following periods:

- January – March
- April – June
- July – September
- October – December

If a sample is unable to be collected during the a period due to the lack of a qualifying discharge or adverse or climatic conditions (such as local flooding, high winds, hurricanes, tornadoes, electrical storms, drought, etc.) a substitute sample from a qualifying discharge event during the next period may be collected.

8.1.3 Sampling Conditions

Per MSGP Part 6.1.3, samples shall be collected from the outfall from a measurable storm event (a storm event that results in an actual discharge from the site) that follows the preceding measurable storm event by at least 72 hours (3 days).

The 72-hour storm interval does not apply if it can be documented that less than a 72-hour interval is representative for local storm events during the sampling period. In the case of snowmelt, the monitoring must be performed at a time when a measurable discharge occurs. There is no MSGP requirement to collect a benchmark monitoring sample during a discharge from snowmelt.

MSGP Part 6.1.4 states that samples are to be collected within 30 minutes of the storm event. Since the actual discharge from the outfall does not typically occur within 30 minutes of the start of the storm event, this sampling requirement has been interpreted for the Landfill to mean that, the ideal sample is to be collected during the first 30 minutes of the actual discharge from the outfall.

If it is not practical to collect the sample within the first 30 minutes of the discharge from the outfall, the sample shall be collected as soon as practicable. Documentation shall be kept with the SWPPP and/or DMR explaining why it was not possible to take samples within the first 30 minutes.

8.1.4 Sample Collection

Per MSGP Part 6.1.4, the sample shall consist of one grab sample. Per MSGP Part B.10.A, samples and measurements taken for the purpose of monitoring must be representative of the volume and nature of the monitored activity.

Per MSGP B.10.D, monitoring must be conducted according to test procedures approved under 40 CFR Part 136. Section 3.2 of the EPA Sampling Guide provides additional information on the protocols for collecting samples.

Persons collecting samples shall be appropriately trained in accordance with Section 2.2 – Training.

8.1.5 Field Data

Per MSGP Part B.10.C.(1 and 2), the following information shall be recorded for each sampling event:

- Date, exact place, and time of sampling
- Sampler's name

8.1.6 Sample Analysis

Per MSGP Part 6.2.1.1 and 8.L.9, benchmark samples shall be analyzed for the following parameters:

- Total suspended solids (TSS; EPA Method 160.2)
- Total Iron (EPA Method 200.8)

Per MSGP Part B.10.D.(3 through 6), the following information shall be recorded for each laboratory sample:

- Initials or name(s) of the individual(s) who performed the analysis
- Date and time analyses performed
- Analytical techniques or methods used
- Results of such analyses

8.1.7 Evaluation of Results

Per MSGP Part 8.L.9, Table 8.L-1, the sector-specific benchmark monitoring concentrations for the Landfill are:

- Total Suspended Solids (TSS): 100 mg/L
- Total Iron: 1 mg/L

Per MSGP Part 6.2.1, the benchmark concentrations are *not considered effluent limitations*. Rather, the results of benchmark monitoring are primarily for the facility's use in determining the overall effectiveness of the SWPPP in controlling the discharge of pollutants to receiving waters. As such, sampling results above the benchmark concentration are not permit violations, but rather as indicators that modifications to the SWPPP may be necessary.

The laboratory results shall be reviewed upon their receipt to determine if the results were above the benchmark concentration. Per SWPPP Sections 9.2 and 9.3, an evaluation must be completed within 24 hours of this review to determine if the average results are above the benchmark concentration, triggering a review to determine if corrective actions are required.

Section 4.2 of the EPA Sampling Guide provides additional guidance on evaluating benchmark monitoring results.

8.1.7.1 Results Below Benchmark Concentrations

Per MSGP 6.2.1.2, if the average of the first four sampling events for any benchmark parameter is below the benchmark concentration, monitoring for that parameter may be discontinued for the remainder of the permit term.

8.1.7.2 Results Above Benchmark Concentrations

Per MSGP 6.2.1.2, if the average of the first four sampling events for a benchmark parameter is above the benchmark concentration or if a four-quarter average above the benchmark concentration is mathematically certain, an evaluation of the selection, design, installation, and implementation of the site control measures shall be conducted to determine if modifications are necessary.

After making any necessary modifications, monitoring shall continue for four additional quarters. This process must be repeated throughout the MSGP term until four consecutive quarters of monitoring result in an average concentration below the benchmark concentration.

If no further pollutant reductions are technologically available and economically practicable and achievable in light of best industry practice to meet the technology-based effluent limits or are necessary, monitoring shall continue at least once per year. Such a determination must be documented and retained with the SWPPP.

For the first 4 quarters of sampling under the 2015 MSGP the facility averaged 1.6 mg/L for iron. During the previous permit term an evaluation was conducted to determine if additional controls could be used to reduce overall iron concentration in stormwater discharge from the facility. This evaluation concluded that no further pollutant reductions are technologically available and economically practicable and achievable in light of best industry practice to meet the technology-based effluent limits. This evaluation was reviewed

and determined to be applicable to current operations. Therefore the facility will conduct benchmark monitoring once per year for the remainder of the current MSGP.

While the MSGP does not require any specific action for individual benchmark monitoring results above the benchmark concentration, such a result should prompt a review of the site controls during the next Routine Facility Inspection, at a minimum. MSGP Part 5.4 requires the SWPPP to document any benchmark exceedances and how they were responded to.

8.1.7.3 Results At Background Concentrations

If the average concentration of a pollutant is above the benchmark value, but the results are attributable solely to the presence of that parameter in the natural background, corrective action or additional benchmark monitoring are not required provided that the average concentration is less than or equal to the concentration of that parameter in the natural background.

Natural background parameters include those substances that are naturally occurring in soils or groundwater. Background parameters do not include legacy pollutants from any earlier activities at the site, or pollutants in run-on from neighboring sources which are not naturally occurring.

The supporting rationale for such a determination shall be maintained with the SWPPP. This rationale may include previously collected data, including literature studies.

8.1.8 Reporting

Monitoring results for each outfall associated with industrial activity must be submitted via the EPA's NetDMR online, within 30 days after receipt of laboratory results. For each outfall, one DMR form must be submitted per quarterly storm event sampled.

8.2 Quarterly Visual Assessment

Per MSGP Part 3.2.1, quarterly visual assessments are required for the entire term of the MSGP.

8.2.1 Sampling Location

Samples for the visual assessment shall be collected from the outlet of the outfall pipe from the Section III sedimentation pond to the level spreader.

8.2.2 Sampling Frequency

If the required sampling conditions exist, a sample shall be collected quarterly during the following periods:

- January – March
- April – June
- July – September
- October – December

If a sample is unable to be collected during the specified sampling period due to the lack of a qualifying discharge adverse or climatic conditions (such as local flooding, high winds, hurricanes, tornadoes, electrical storms, drought, etc.) a substitute sample from a qualifying discharge event during the next period may be collected.

8.2.3 Sampling Conditions

The sample shall be collected from a discharge resulting from a measurable storm event that occurs at least 72 hours (3 days) from the previous discharge. The sample shall be collected during the first 30 minutes of the discharge from the sampling location, if practical. If sample collection during the first 30 minutes is impracticable, the sample shall be taken as soon as possible thereafter. Information on why sampling during the first 30 minutes was impracticable shall be documented on the Quarterly Visual Assessment Form.

In accordance with MSGP Part 3.2.3, at least one of the quarterly visual samples should capture discharge from a snowmelt.

8.2.4 Sample Collection

Per MSGP Part 6.1.4, the sample shall consist of one grab sample.

Although the samples are not required to be collected consistent with 40 CFR Part 136 procedures, they should be collected in such a manner that the samples are representative of the stormwater discharge. Section 3.2 of the EPA Sampling Guide provides additional information on the protocols for collecting samples. Samples shall be collected in or transferred to a clean, clear glass or plastic container.

8.2.5 Sample Assessment

In a well-lit area, the sample shall be visually inspected following water quality characteristics:

- Color – Note any unusual color, such as reddish, brown, or yellow hue.
- Odor – Note any noticeable odor, for instance if it smells like gasoline fumes, rotten eggs, raw sewage, or solvents odor, or has a sour smell.
- Clarity – Note if the discharge is not clear, but is instead cloudy or opaque.
- Floating solids – If materials are floating at or near the top of the bottle, note of what the materials appear to be.
- Settled solids – Wait about a half hour after collection to allow any settlement, then note the type and size of materials that are settled at the bottom of the container.
- Suspended solids – Particles suspended in the water will affect its clarity and color.
- Oil sheen – Note any rainbow color or sheen over the surface of the water.
- Foam – Gently shake the bottle and note whether there is any foam.
- Other obvious indicators or stormwater pollution

Section 4.1 of the EPA Sampling Guide provides additional guidance on evaluating visual assessment results.

8.2.6 Documentation & Reporting

Results of the visual examination shall be recorded on the Quarterly Visual Assessment Form included in Attachment H.

In accordance with MSGP Part 3.2.2, this documentation shall include:

- Sample location
- Sample collection date and time for each sample
- Visual assessment date and time for each sample
- Personnel collecting the sample and performing visual assessment, and their signature
- Nature of the discharge (i.e., runoff or snowmelt)
- Results of observations of the stormwater discharge
- Probable sources of any observed stormwater contamination
- If applicable, why it was impracticable or not possible to take samples within the first 30 minutes

The MSGP does require the form to be signed by a duly-authorized representative in accordance with Appendix B, Subsection 11.

In the event that sampling cannot be carried out for a given period due to adverse climatic conditions (i.e., drought or extended frozen conditions), the reason for not performing the visual examination shall be documented.

The completed Quarterly Visual Assessment Forms shall be maintained with the SWPPP and/or in the on-site files. Visual assessment reports are not required to be submitted to the EPA unless specifically requested by the EPA.

8.2.7 Evaluation of Results

Corrective action required as a result of the quarterly visual assessment must be performed consistent with SWPPP Section 10.1 and Section 4 of the MSGP.

8.3 Effluent-Based Limits Monitoring

Per MSGP Part 6.2.2, monitoring for effluent-based limits, as listed in MSGP Part 8.L.10, is not required because the Landfill is not subject to 40 CFR Part 257 because it only discharges leachate to a POTW. Landfills that only discharge leachate to a POTW are specifically exempted from 40 CFR Part 257, which are the pretreatment standard applicable only to surface water discharges from waste disposal facilities.

8.4 State-Specific Monitoring

Per MSGP Part 6.2.3, additional State-specific monitoring could be required for a facility. MSGP Part 9.1.2 provides details on the additional requirements for facilities in Massachusetts, as follows:

- Per MSGP Part 9.1.2.2, upon request by the MassDEP, the Landfill shall provide a copy of the SWPPP within 14 days. At this time, the MassDEP has requested the Landfill to provide a copy of the SWPPP.

- Per MSGP Part 9.1.2.4, Submission of Monitoring Data. The results of any monitoring required by this permit must be sent to the appropriate Regional Office of the Department [attention: Bureau of Waste Prevention] where the monitoring identifies exceedances of any effluent limits or benchmarks for any parameter for which monitoring is required under this permit. In addition, any follow-up monitoring and a description of the corrective actions required and undertaken to meet

the effluent limits or benchmarks must be sent to the appropriate Department Regional Office. Steps to comply with this provision are described in SWPPP Sections 9.2.6 and 10.5.

8.5 Tribal-Specific Monitoring

Per MSGP Part 6.2.3, additional tribal-specific monitoring could be required for a facility. However, per MSGP Part 9.1.3, there are no additional requirements for Indian Country lands within Massachusetts.

8.6 Impaired Waters Monitoring

Per MSGP Parts 2.2.2 and 6.2.4, additional monitoring may be required if a facility discharges to an impaired waters with an EPA approved or established TMDL.

MSGP Appendix A defines an "impaired water" as one that has been identified by a State or EPA pursuant to Section 303(d) of the Clean Water Act as not meeting applicable State water quality standards (these waters are called "water quality limited segments" under 40 CFR 30.2(j)). Impaired waters include both waters with approved or established Total Maximum Daily Load (TMDLs), and those for which a TMDL has not yet been approved or established.

MSGP Appendix A defines a TMDL as a calculation of the maximum amount of a pollutant that a waterbody can receive and still meet water quality standards, and an allocation of that amount to the pollutant's sources.

Stormwater at the Landfill discharges to the Pines River, which is identified by the MassDEP and EPA as an impaired water. The pollutant causing the impairment is listed as Fecal Coliform.

8.7 Additional Monitoring Required by EPA

Per MSGP Part 6.2.5, the EPA may require additional monitoring. At this time, the EPA has not notified the Landfill of any additional monitoring required.

8.8 Other Additional Monitoring

Per MSGP Part B.12.D.2, if any pollutant is monitored more frequently than required by the permit using test procedures approved under 40 CFR Part 136 or as specified in the MSGP, the results of such monitoring must be included in the calculation and reporting of data.

8.9 Precipitation Data & Laboratory

Per MSGP Part 5.1.5.2, the SWPPP is required to list the procedures (e.g., responsible staff, logistics, laboratory to be used, etc.) for gathering storm event data.

In general, the SWPPP Team Coordinator shall be responsible to coordinate the timing of sampling events. Precipitation data may be obtained from online sources of this information. Typically the facility uses Eastern Analytical to analyze samples collected at the Landfill.

Attachment B

Industrial Wastewater Discharge Permit

LYNN
400 Parkland Avenue • Lynn, Massachusetts 01905-1138 • (781) 596-2400 • Fax (781) 595-1420

WATER & SEWER
COMMISSION

Permit # SS013

INDUSTRIAL WASTEWATER DISCHARGE PERMIT

In accordance with the provisions of Article VII, Section 3 of the Lynn Water and Sewer Commission's Rules and Regulations:

Site Address: Wheelabrator Saugus Inc.
100 Salem Turnpike
Saugus, MA 01906

REC'D SEP 17 2013

Classified by SIC Code: # 4953

Categorical Status: Significant Industrial User
General Prohibitions

Wheelabrator Saugus J.V. is hereby authorized to discharge industrial wastewater from the above identified facility and through the outfall(s) identified herein into the Lynn Water and Sewer Commission's (Commission's) Wastewater Treatment Facility in accordance with the conditions set forth in this permit. Compliance with this permit does not relieve the permittee of its obligation to comply with any or all applicable pretreatment regulations, standards, or requirements under local, State, and Federal laws including any such regulations, standards requirements, or laws that may become effective during the terms of this permit.

Noncompliance with any term or condition of this permit shall constitute a violation of the Commission's Rules and Regulations.

This permit shall become effective on September 30, 2013 and shall expire at Midnight on September 30, 2017

If the permittee wishes to continue to discharge after the expiration date of this permit, an application must be filed for a renewal permit in accordance with the requirements of Article VII, Section 6 of the Commission's Rules and Regulations, a minimum of 180 days prior to the expiration date.

Issued this 10th day of September 2013

Signed: Dan F O'Neill
Lynn Water and Sewer Commission

Part 1. – EFFLUENT LIMITATIONS

A. During the period of 9/30/2013 to 9/30/2017, the permittee is authorized to discharge process wastewater to the Lynn Regional Wastewater Treatment Facility from the outfall listed below.

OUTFALL	DESCRIPTION
001	Landfill Leachate

B. During the period of 9/30/2013 to 9/30/2017, the discharge from 001 shall not exceed the following effluent limitations. Effluent from this outfall consists of treated landfill leachate.

EFFLUENT LIMITATIONS

PARAMETERS	UNITS	MONTHLY AVERAGE	MAX/DAY
Peak Flow	gpd	250,000	300,000
pH	pH units		5.5-10.0
Maximum Temperature	Degrees C		66
Biochemical Oxygen Demand (BOD)	(mg/l)		138
Total Suspended Solids (TSS)	(mg/l)		120
Oil and Grease	(mg/l)		100
Cadmium (Cd)	(mg/l)		2.60
Lead (Pb)	(mg/l)		2.05
Zinc (Zn)	(mg/l)		2.12

C. The Permittee shall not discharge wastewater containing any of the following substances from the facility:

1. Fats, wax, grease, or oils of petroleum origin, whether emulsified or not, in excess of one hundred (100) mg/l or containing substances which may solidify or become viscous at temperatures between 0-60° C

2. Any gasoline, hydrocarbon, benzene, naptha, fuel oil or other flamable or explosive liquids, solids, or gasses.

Part 1. EFFLUENT LIMITATIONS (con't)

3. Garbage with particles greater than one-half inch in any dimension, animal guts or tissue, paunch manure, bones, hair, hides or fleshings, entrails, whole blood, feathers, ashes, cinders, sand, spent lime, stone or marble dust, metal, glass, straw, shavings, grass clippings, rags, spent hops, wastepaper, wood, plastics, tar, mud, glass grinding or polishing wastes, or any other solid or viscous substances capable of causing obstructions or other interference with proper operation of the sewer system.

4. Any pollutant, including oxygen demanding pollutants (BOD, ect.) at flow rate and/or concentration which will cause the pollutant to pass through to the receiving water or interfere with the Commission's Wastewater Treatment Facility. For the purpose of this section, the terms "pass through" and "interference" have the same definition as appears in Article II, Sections 36 & 49 of the Commission's Rules and Regulations.

5. Noxious or malodorous gasses or substances capable of creating a public nuisance, including pollutants which result in the presence of toxic gasses, vapors, or fumes.

6. Any substance which will alter the natural and expected color of the combined wastewater exiting the permitted facility which could have the potential to create a nuisance or treatment capability concern at the Lynn Regional Wastewater Treatment Facility.

7. Any medical or infectious wastes.
8. Any radioactive wastes or isotopes.

9. Concentrated chemicals and hazardous materials in sufficient quantity, either singly or by interaction with other pollutants, to cause interference or pass through at the Publicly Owned Treatment Works (POTW), to constitute a hazard to humans or animals, to create a toxic effect in the receiving waters of the POTW, or to exceed limitations set forth by EPA pursuant to Section 307 of the Clean Water Act.

D. All discharges shall comply with all other applicable laws, regulations, standards, and requirements contained in the Commission's Rules and Regulations and any applicable State and Federal pretreatment laws, regulations, standards, and requirements including such laws, regulations, standards and requirements that may become effective during the terms of this permit.

E. Any discharge containing greater than 300 mg/l BOD or 300 mg/l TSS will accrue a surcharge based upon the most recent Lynn Water and Sewer Commission Rate Schedule.

PART 2. MONITORING REQUIREMENTS

Spring Reporting Period
Samples shall be collected between April 1st and May 15th
Fall Reporting Period
Samples shall be collected between October 1st and November 15th

A. During the period 9/30/2013 to 9/30/2017 the Permittee shall monitor outfall(s) 001, for the required pollutants as listed in the Effluent Limit Concentrations table at the indicated frequency and standards.

Parameter	Frequency *	Sample Type
Flow	Continuous	Meter Reading
BOD	3/period	Time Composite
TSS	3/period	Time Composite
Metals	3/period	Time Composite
Oil & Grease	4/period	Grab
pH	Continuous	Probe
Temperature	4/period	Grab

*Frequency refers to the number of days wastewater is to be sampled for each of the above-mentioned reporting periods.

B. Sampling Location:

The sampling point is a tap on a ½" pipe located in the Deionization (DI) House upstream of the "P" trap which collects wastewater before the sewer discharge line.

Sampling and Analysis: All analyses shall be performed in accordance with the procedures established by the EPA Administrator pursuant to Section 304(h) of the Clean Water Act and contained in 40 CFR part 136 and amendments thereto or with any other test procedures approved by the EPA Administrator (see 136.4 and 136.5). Sampling shall be performed in accordance with the techniques approved by the EPA Administrator. Where 40 CFR part 136 does not include sampling or analytical techniques for the pollutants in question, or where the EPA Administrator determines that the part 136 sampling and analytical techniques are inappropriate for the pollutant in question, sampling and analyses shall be performed using validated analytical methods or any other sampling and analytical procedures suggested by the POTW or other parties, approved by the EPA Administrator. Unless otherwise authorized by the Commission, analyses shall be performed by a Massachusetts Department of Environmental Protection (MADEP) certified laboratory.

PART 3. – REPORTING REQUIREMENTS

A. Monitoring Reports: Monitoring results obtained shall be summarized and reported on an Industrial User Monitoring Report Form twice per year. The reports are due on the 15th day of June and December. The report shall indicate the nature and concentrations of all pollutants in the effluent for which sampling and analyses were performed along with the corresponding flow data.

If the permittee monitors any pollutant more frequently than required by this permit, using test procedures prescribed in 40 CFR Part 136 or amendments thereto, or otherwise approved by EPA or as specified in this permit, the results of such monitoring shall be included in any calculations of actual daily maximum or monthly average pollutant discharge and results shall be reported in the semi-annual report submitted to the Commission. Such increased monitoring frequency shall also be indicated in the semi-annual report.

Monitoring Reports shall include:

(a) The date, exact place, time, and methods of sampling or measurements and sample preservation techniques or procedures.

(b) Who performed the sampling or measurements.

(c) The date(s) analyses were performed.

(d) Who performed the analyses.

(e) The analytical techniques used.

(f) The results of such analyses.

(g) Compliance status.

(h) Signature of compliance and authenticity. The following statement must accompany the signature and date of a company's designated wastewater official: "I certify under penalty of law that this document and all attachments were prepared under my direction and supervision in accordance with all Federal, State and LWSC laws, rules, and regulations and that the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I further state that all pretreatment standards are being met with the exceptions noted below. (List violations)

PART 3. – REPORTING REQUIREMENTS (con't)

B. Automatic Resampling: If the results of the permittee's wastewater analysis indicates that a violation of this permit has occurred, the permittee must:

1. Inform the Commission of the violation within 24 hours.

2. Repeat the sampling and pollutant analysis and submit, in writing, the results of this second analysis within thirty (30) days of the first violation.

C. Accidental Discharge Report:

1. The permittee shall notify the Commission immediately upon the occurrence of an accidental discharge of substances prohibited by the Commission's Rules and Regulations or any slug loads or spills that may enter the public sewer. During normal business hours the Commission shall be notified by telephone at (781) 596-2400. At all other times, the Commission shall be reached at (781) 596-2406. The notification shall include location of discharge, date and time thereof, type of waste, including concentration and volume and corrective actions taken. The permittee's notification of accidental release in accordance with this section does not relieve it of other reporting requirements that arise under Local, State, or Federal laws.

2. Within five days following an accidental discharge, the permittee shall submit to the Commission a detailed written report. The report shall specify:

(a) Description and cause of the upset, slug load, or accidental discharge, the cause thereof, and the impact of the permittee's compliance status. The description should also include location of discharge, type, concentration, and volume of waste.

(b) Duration of noncompliance, including exact dates and times of noncompliance and, if the noncompliance is continuing, the time by which compliance is reasonably expected to occur.

(c) All steps taken or to be taken to reduce, eliminate, and/or prevent recurrence of such an upset, slug load, accidental discharge, or other conditions of noncompliance.

D. Report Submittals

All reports required by this permit shall be submitted to the Commission at the following address:

Lynn Water & Sewer Commission
Attn: Pretreatment Coordinator
400 Parkland Avenue
Lynn, MA 01905

PART 4. APPLICABLE PENALTIES FOR VIOLATIONS OF PRETREATMENT STANDARDS AND REQUIREMENTS

A. The following table of maximum penalty amounts shall apply to the specific categories of violations listed therein:

VIOLATION	MAXIMUM PENALTY (Charges per violation)
pH Violations:	
0.0 to 2.0	$5000.00
over 2.0 to 3.0	$4000.00
over 3.0 to 4.0	$2500.00
over 4.0 to 5.0	$1000.00
over 5.0 to 5.5	$ 500.00
over 10.0 to 10.4	$ 250.00
over 10.4 to 11.4	$1000.00
over 11.4 to 12.4	$2500.00
over 12.4 to 14.0	$5000.00
Exceeding Permit Limit for Regulated Pollutants Metals (Including Cyanide)	$1000.00
Explosives (Including gasoline, Volatile Organics, Etc.) See Rules & Regulations, Article V. Section 2a	$5000.00
Non Petroleum-Based Oil and Grease	$ 100.00
Petroleum/Mineral/Non-Biodegradable Cutting Oil	$ 100.00
Flow Obstructions See Rules & Regulations, Article V. Section 2b	$5000.00
Untimely and Incomplete Reporting	$ 100.00/day
Discharges causing interference, pass-through, or resulting in a violation of Commission's NPDES Permit	$5000.00
Non-permitted Discharge	$1000.00

PART 4. APPLICABLE PENALTIES FOR VIOLATIONS OF PRETREATMENT STANDARDS AND REQUIREMENTS (con't)

B. Discharges of the following materials to the sewer or drainage system, including catch basins, shall be punishable by a fine of not less than $1000.00 or more than $5000.00 per violation. Garbage with particles greater than one-half inch in any dimension, animal guts or tissues, paunch manure, bones, hair, hides or fleshings, entrails, whole blood, feathers, ashes, cinders, sand, spent lime, stone or marble dust, metal, glass, straw shavings, grass clippings, rags, spent hops, waste paper, wood, plastics, gas, tar, asphalt residues, residues from refining or processing, fuel or lubricating oil, mud, or glass grinding or polishing wastes, antifreeze, paint, shellac, paint thinner, or any other material of substance which is or could be harmful to the Commission's equipment or property, or to human health, safety, or welfare, or to the environment.

C. Civil and Criminal Liability: Nothing in this permit shall be construed to relieve the permittee from civil and/or criminal proceedings for noncompliance as specified in the Commission's Rules and Regulations or State or Federal laws or regulations.

PART 5 – SPECIAL CONDITIONS

A. Additional/Special Monitoring Requirements:

1. Hazardous Waste Disposal: Dispose of all Hazardous Waste as per Federal, State, and Local regulations.

2. Chemical Storage: Contain all chemicals stored near drain openings and/or plug all drain openings in immediate area of stored chemicals.

PART 6 – STANDARD CONDITIONS

A. General Conditions and Definitions

1. Severability: The Provisions of this permit are severable, and if any provision of this permit, or the application of any provision of this permit to any circumstance is held invalid, the application of such provision to other circumstances, and the remainder of this permit, shall not be affected thereby.

2. Duty to Comply: The permittee must comply with all conditions of this permit. Failure to comply with the requirements of this permit shall be grounds for administrative action or enforcement proceedings.

PART 6 – STANDARD CONDITIONS (con't)

3. Duty to Mitigate: The permittee shall take all reasonable steps to minimize or correct any adverse impact to the public treatment plant or the environment resulting from noncompliance with this permit, including such accelerated or additional monitoring as necessary to determine the nature and impact of the non-complying discharge.

4. Permit Modification/Reopener Clause: The filing of a request by the permittee for a permit modification, revocation and reissuance, or termination, or a notification of planned changes or anticipated noncompliance, does not stay any permit condition. This permit may be modified for good causes including, but not limited to the following:

   (a) To incorporate any new or revised Federal, State, or Local pretreatment standards or requirements.

   (b) Substantial alterations or additions to the discharger's operation processes, or discharge volume or character which were not considered in drafting the effective permit.

   (c) A change in any condition in either the industrial user or the POTW that requires either a temporary or permanent reduction or elimination of the authorized discharge.

   (d) Information indicating that the permitted discharge posed a threat to the Commission's collection and treatment systems, POTW personnel, or the receiving waters.

   (e) Violation of any terms or conditions of the permit.

   (f) Misrepresentation or failure to disclose fully all relevant facts in the permit application or in any required reporting.

   (g) To correct typographical or other errors in the permit.

   (h) Upon request of the permittee, provided such request does not create a violation of any applicable requirements, standards, laws, or rules and regulations.

PART 6 – STANDARD CONDITIONS (con't)

5. Permit Termination: This permit may be terminated for the following reasons:

    (a) Falsifying self-monitoring reports.

    (b) Tampering with monitoring equipment.

    (c) Refusing to allow timely access to premises and records.

    (d) Failure to meet effluent limitations.

    (e) Failure to pay fines, fees, or surcharges.

    (f) Failure to meet compliance schedules.

6. Permit Appeals: The permittee may petition to appeal the terms of this permit within thirty (30) days of this notice. This petition must be in writing; failure to submit a petition for review shall be deemed a waiver of the appeal. In its petition, the permittee must indicate the permit provisions objected to, the reasons for this objection, and the alternative condition, if any, it seeks to be placed in the permit.

7. Limitations on Permit Transfer: This permit shall not be reassigned or transferred, sold to a new owner, new user, different premises, or changed operation without prior written approval from the LWSC: The permittee must give at least ninety (90) days advance notice to the LWSC. The notice must include a written and signed certification by the new owner which:

    (a) States that the new owner has no immediate intent to change the facility's operations and processes.

    (b) Identifies the specific date on which the transfer is to occur.

    (c) Acknowledges full responsibility for complying with the existing permit.

8. Dilution: The permittee shall not increase the use of potable or process water, or in any way, attempt to dilute effluent as a partial or complete substitute for adequate treatment to achieve compliance with the limitations contained in this permit.

PART 6 – STANDARD CONDITIONS (con't)

9. Continuation of Expired Permit: An expired permit will continue to be effective and enforceable until the permit is reissued if:

   (a) The permittee has submitted a complete permit application at least (180) days prior to the expiration date of the user's existing permit.

   (b) The failure to reissue the permit, prior to expiration of the previous permit is not due to any act or failure to act on the part of the permittee.

10. Definitions:

Bypass – The intentional diversion of wastes from any portion of a treatment facility.

Composite Sample – A sample that is collected over time, formed either by continuous sampling or by mixing discrete samples. The sample may be composited either as a time composite sample: composed of discrete sample aliquots collected in one container at constant time intervals providing representative samples irrespective of stream flow; or as a flow proportional composite sample: collected as a constant sample volume at time intervals proportional to stream flow.

Contact Cooling Water – Water used for cooling, washdown, etc., which may become contaminated either through the use of water treatment chemicals used for corrosion inhibitors or biocides, or by direct contact with process materials and/or wastewater.

Daily Maximum – The maximum allowable discharge of pollutant during a calendar day. Where daily maximum limitations are expressed in units of mass, daily discharge is the total mass discharged over the course of the day. Where daily maximum limitations are expressed in terms of concentration, the daily discharge is the arithmetic average measurement of the pollutant concentration derived from all measurements taken that day.

Grab Sample – An individual sample collected in less than fifteen (15) minutes, without regard for time or flow.

Non-Contact Cooling Water – Water used for cooling purposes only which has no direct contact with any raw material, intermediate, or final product, and which does not contain a level of contaminants detectably higher than that of the intake water.

Upset – An exceptional incident in which there is unintentional and temporary noncompliance with technology based permit effluent limitations because of factors beyond the reasonable control of the permittee, excluding such factors as operational error, improperly designed treatment systems, inadequate facilities, or improper operation and maintenance or lack thereof.

PART 6 – STANDARD CONDITIONS (con't)

B. Operations and Maintenance of Pollution Controls

1. The permittee shall at all times properly operate and maintain all facilities and systems of treatment and control (and related appurtenances) which are installed or used by the permittee to achieve compliance with the conditions of this permit. Proper operation and maintenance includes but is not limited to: effective performance, adequate funding, adequate operator staffing and training, and adequate laboratory or process controls, including appropriate quality assurance procedures. This provision requires the operation of back-up or auxiliary facilities or similar systems only when necessary to achieve compliance with the conditions of this permit.

2. Duty to Halt or Reduce Activity: Upon reduction of efficiency of operation, or loss or failure of all or part of the treatment facility, the permittee shall, to the extent necessary to maintain compliance with its permit, control its production and/or discharges until operation of the treatment facility is restored or an alternative method of treatment is provided. The permittee shall not use the fact that "it would have been necessary to halt or reduce the permitted activity in order to maintain compliance" as a defense in an enforcement action.

3. Bypass of Treatment Facilities: Bypass is prohibited unless it is unavoidable to prevent loss of life, personal injury, or severe property damage or if no feasible alternatives exist. The permittee may allow bypass to occur which does not cause effluent limitations to be exceeded, but only if it is also for essential maintenance to assure efficient operation.

4. Notification of Bypass:

   (a) Anticipated Bypass: If the permittee knows in advance of the need for a bypass, it shall submit prior written notice, at least ten (10) days before the date of the bypass, to the LWSC.

   (b) Unanticipated Bypass: The permittee shall immediately notify the LWSC and submit a written notice to the LWSC within five (5) days. This report shall specify:

      aa. A description of the bypass and its cause, including its duration.

      bb. Whether the bypass has been corrected.

      cc: The steps being taken to reduce, eliminate and prevent a reoccurrence of the bypass.

PART 6 – STANDARD CONDITIONS (con't)

5. Removed Substances: Solids, sludges, filter backwash, or other pollutants removed in the course of treatment or control of wastewaters shall be disposed of in accordance with Section 405 of the Clean Water Act, Subtitles C. and D. of the Resource Conservation and Recovery Act, and all applicable State Regulations.

C. Monitoring and Records

1. Representative Sampling: Samples and measurements taken as required herein shall be representative of the volume and nature of the monitored discharge. All samples shall be taken at the monitoring points specified in this permit and, unless otherwise specified, before the effluent joins or is diluted by any other wastestream, body of water, or substance. All equipment used for sampling and analysis must be routinely calibrated, inspected and maintained to ensure their accuracy. Monitoring points shall not be changed without notification to and the approval from the LWSC.

   An industry must sample its wastewater during representative operational periods. Under no circumstances shall an industry submit non-representative analyses that pertain to periods of facility shutdown or decreased operations.

   An industry may request, in writing, an extension of its sampling and/or reporting deadlines. Such requests must be received prior to the deadline in question and shall pertain to unforeseen circumstances reflecting the representative nature of the facility's discharge, sampling, or analyses. The extension requests will be granted at the discretion of the Commission.

   Sampling of effluent diluted or otherwise impacted by any other wastestream, body of water, or substance that originates off-site from the industry's premises shall not be considered representative or valid for monitoring or enforcement purposes.

2. Inspection and Entry: The permittee shall allow the LWSC, or an authorized representative, upon the presentation of credentials and other documents as may be required by law, to:

   (a) Enter upon the permittee's premises where a regulated facility, or activity is located or conducted, or where records must be kept under the conditions of this permit.

   (b) Have access to and copy, at reasonable times, any records that must be kept under the conditions of this permit.

PART 6 – STANDARD CONDITIONS (con't)

(c) Inspect at reasonable times any facilities, equipment, practices, or operations regulated or required under this permit.

(d) Sample or monitor, for the purposes of assuring permit compliance, any substances or parameters at any locations.

(e) Inspect any production, manufacturing, fabricating, or storage area where pollutants regulated under this permit could originate, be stored, or be discharged to the sewer system.

3. Retention of Records: The permittee shall retain records of all monitoring information, including all calibration and maintenance records and all original strip chart recordings for continuous monitoring instrumentation, copies of all reports required by this permit, and records of all data used to complete the application for this permit, for a period of at least three years from the date of the sample, measurement, report, or application. This period may be extended by request of the LWSC at any time.

4. Falsifying Information: Knowingly making any false statement on any report or other document required by the LWSC or knowingly rendering any monitoring device or method inaccurate is a crime and may result in fines and/or the termination of services.

5. Duty to Provide Information: The permittee shall furnish to the LWSC, within 24 hours, any information which the LWSC may request to determine whether cause exists for modifying, revoking and reissuing, or terminating this permit, or to determine compliance with this permit. The permittee shall also, upon request, furnish to the LWSC within 48 hours, copies of any records required to be kept by this permit.